

### **LINE ITEM 3 SPECIFICATION**

#### **1A. GENERAL ASSEMBLY**

THE COMPLETE TRUCK MOUNTED ATTENUATOR (TMA) SHALL BE DESIGNED TO MAKE ATTACHMENT TO A VARIETY OF SUPPORT VEHICLES AND BE RAISED AND LOWERED FROM INSIDE THE CAB OF THE SUPPORT VEHICLE. MAJOR COMPONENTS (LISTED BELOW) STAY TOGETHER WHEN DETACHED FROM THE SUPPORT VEHICLE. THE TRUCK MOUNTED ATTENUATOR MUST BE CAPABLE OF BEING MOUNTED TO A VARIETY OF VEHICLES WITH SIZES RANGING FROM 13,500 GVW TO 25,000 GVW AND STILL MEET ALL MASH-2016 CERTIFICATIONS. THE TMA FRAME SHALL BE CAPABLE OF COLLAPSING WHEN IMPACTED BY AN ERRANT VEHICLE. NO PORTION OF THE TMA SHALL PROTRUDE FORWARD UNDER THE TRUCK DAMAGING ITS VITAL ELEMENTS DURING AN IMPACT.

THE TMA SHALL NOT PROTRUDE OVER INTO OR UNDER THE TRUCK WHEN IMPACTED. FURTHER, THE TMA SHALL NOT IMPEDE THE LINE-OF-SITE OF AN ARROWBOARD OR MESSAGE BOARD MOUNTED ON THE TRUCK, INSTALLED PER MUTCD (MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES) GUIDELINES AT A HEIGHT OF 7'-0" TO THE BOTTOM OF BOARD.

THE TMA SYSTEM MUST BE DELIVERED ASSEMBLED AND READY FOR ATTACHMENT TO SUPPORT VEHICLE.

#### **1B. MAJOR COMPONENTS**

THE TRUCK MOUNTED ATTENUATOR WILL CONSIST OF THE FOLLOWING MAJOR COMPONENTS:

- 1- RE-USABLE STEEL FRAME WITH ARTICULATING ARMS
- 2- DUAL (2) CARTRIDGE ATTENUATION SYSTEM
- 3- STEEL BACKUP FOR ATTACHMENT TO HOST VEHICLE
- 4- HYDRAULIC SYSTEM CAPABLE OF RAISING AND STORING THE ENTIRE SYSTEM VERTICALLY 90 DEGREES FOR TRANSPORT AND STORAGE

#### **1C. MINIMUM WEIGHT AND DIMENSIONS**

LENGTH- 13' 2"

WIDTH-93"

HEIGHT-45"

WEIGHT- 1,996LBS

#### **1D. CRASH TESTING CRITERIA**

THE TMA SHALL HAVE BEEN TESTED TO, AND SUCCESSFULLY PASSED ALL 4 TESTS THAT FALL UNDER THE GUIDELINES OF MASH-2016 TEST LEVEL 3 FOR TRUCK MOUNTED ATTENUATORS.

#### **1E. LIGHTING AND VISIBILITY**

THE TMA SHALL HAVE A LIGHTING ASSEMBLY PER FMVSS NO. 108 LAMPS, REFLECTIVE DEVICES, AND ASSOCIATED EQUIPMENT. ALL COMPONENTS SHALL BE APPROPRIATE FOR THEIR INTENDED PURPOSE UNDER ANY ADOPTIONS ISSUED BY THE NHTSA, SAE AND FMVSS. THIS IS STANDARD PRACTICE FOR ELECTRICAL LIGHTING. THE TMA SHALL INCLUDE BRAKE LIGHTS, TAILLIGHTS, TURN SIGNALS AND AN ICC BAR LIGHT. WIRES SHALL BE ROUTED IN A PROTECTIVE, JACKETED CABLE. THE CABLE SHALL BE ROUTED AND SECURED TO THE FRAMES AT 450 (18") MAXIMUM INTERVALS. FOR REPAIR OR REPLACEMENT, INDIVIDUAL CIRCUITS SHALL BE EASILY IDENTIFIED AND ACCESSIBLE.

MOLDED CONNECTORS SHALL BE USED WHERE INDIVIDUAL WIRES WOULD OTHERWISE BE EXPOSED TO THE ELEMENTS. A STANDARD, SINGLE, 7 PIN TRAILER CONNECTOR SHALL MAKE THE CONNECTION FOR ALL LIGHTS AND ARROW BOARD TO THE BACK OF THE TRUCK. CONSPICUITY TAPE AND REFLECTORS SHALL BE INSTALLED FOLLOWING THE SAME ESTABLISHED STANDARDS AS THE LIGHTING.

THE SURFACE OF THE IMPACT FRAME FACING ONCOMING TRAFFIC SHALL DISPLAY A BLACK ON YELLOW INVERTED CHEVRON PATTERN WITH 4 IN. WIDE COLOR BANDS. THE COLORS SHALL MEET THE VALUE AND TOLERANCE LIMITS ESTABLISHED BY MUTCD.

1F. ACCEPTABLE BRANDS/MODELS

SAFE STOP 90HD TMA/TMA8292 BY ENERGY ABSORPTIONS SYSTEMS, INC OR EQUAL